



Dart Hawkesbury  
1270 Aberdeen St  
Hawkesbury, ON  
K6A 1K7  
Canada

Tel (613) 632-5200

**D3751-1**  
**Job Sheet 167246**



Part No: D3751-1

Job Qty: 2 ea

Part Name: Shim



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 10/27/17

Job Tracking No:

Created By: Victoria Michaud-Febrille

Due Date: 11/6/17

Description:

Type: SOLD

Ship Via:

DWG Rev. B ✓

### Bill of Materials

### Job Routing

| Op No | Operation          | Qty   | Start Date | Due Date | Standard  |         | Workcenter/Supplier   |           | Sign-off       |
|-------|--------------------|-------|------------|----------|-----------|---------|-----------------------|-----------|----------------|
|       |                    |       |            |          | Setup hrs | Run Hrs | Workcenter / Supplier | Lead Time |                |
| 90    | Start up Operation | 2 Ea  |            | 11/4/17  | 0.00      | 0.00    | Start Up Waterjet2    |           | SC             |
| 100   | Waterjet           | 2 pcs |            | 11/4/17  | 0.00      | 0.17    | Waterjet1             |           | SC             |
| 110   | QC                 | 2 pcs |            | 11/4/17  | 0.00      | 0.00    | QC2                   |           | SC             |
| 120   | QC                 | 2 pcs |            | 11/4/17  | 0.00      | 0.00    | QC8                   |           | 38             |
| 130   | HandFinish         | 2 pcs |            | 11/4/17  | 0.00      | 0.05    | HandFinish1           |           | 2017/10/13/17L |
| 140   | QC                 | 2 pcs |            | 11/4/17  | 0.00      | 0.00    | QC7                   |           | 17/11/16       |
| 150   | Powdercoat         | 2 pcs |            | 11/6/17  | 0.00      | 0.10    | Powdercoat1           |           | 17/11/16       |
| 160   | QC                 | 2 pcs |            | 11/6/17  | 0.00      | 0.00    | QC3                   |           | 38             |
| 170   | Packaging          | 2 pcs |            | 11/6/17  | 0.00      | 0.00    | Packaging3            |           | NOV 17 2017    |
| 180   | QC21-SA            | 2 Ea  |            | 11/6/17  | 0.00      | 0.00    | QC21                  |           | 17/11/17       |

Part Op 100 - 1-Cut as per Dwg D3751 Dwg Rev: B Prog Rev: B 2- Debur if necessary  
Descriptions: 150 - START TIME: 12:00 OVEN TEMPERATURE: 320° FINISH TIME: 12:30 11/3/14.

### Job Allocations

| Operation             | Component Part | Required | Inventory | Allocated | Std Qty |
|-----------------------|----------------|----------|-----------|-----------|---------|
| 90-Start up Operation | M6061T6S.080   | 0        | 95        | 0         | 0       |

### Part Specifications

Specifications could not be found.

Plex 10/27/17 10:08 AM dart.Michaud-Febrille.Victoria

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

**WORK ORDER NON-CONFORMANCE / UPDATE**

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

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| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____<br><br>Date : _____<br><br>_____<br><br>_____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br>Skid-tube <input type="checkbox"/><br>Machining <input type="checkbox"/><br>Cross tube <input type="checkbox"/><br>Small Fab <input type="checkbox"/><br>Water Jet <input type="checkbox"/><br>Prod. Eng. Coord. <input type="checkbox"/><br>Rec/Store/Packaging <input type="checkbox"/><br>Supplier <input type="checkbox"/><br>Engineering <input type="checkbox"/><br>Quality <input type="checkbox"/><br>Other <input type="checkbox"/> | <div style="text-align: center;"> <br/> <b>S003445</b><br/> <br/> <b>Shim</b> </div> <div style="margin-top: 20px;"> <b>PART NO: D3751 - 1</b><br/> <b>Revision:</b><br/> <b>Operation: Start up Operation</b><br/> <b>Quantity: 2</b><br/> <b>Change No:</b> </div> <div style="border: 1px solid black; padding: 5px; margin-top: 10px; width: fit-content;"> <b>Mfg Date: 10/30/17</b><br/> <b>Job No: 167246</b> </div> |                                                |                                               |                                           |                                 |                                       |                                                |                                    |                                        |                                             |                                   |                                   |                                 |                                               |                                |                                               |                                        |                                   |                                                 |                                                            |                               |                                         |                                       |                                          |                                |                                        |                                             |                                            |                                   |                                           |                                   |                                      |                                          |                                     |                                             |                                  |                                     |                                        |                                  |                                  |                                           |                                              |                                             |                                                          |                                     |                                 |                              |                                              |                                        |                                      |                                       |                                  |                                     |                                                |  |  |                                                |                                           |                                           |                                   |               |  |  |  |                                        |  |  |
| Root Cause<br><table border="0" style="width:100%;"> <tr><td><input type="checkbox"/> Environment</td><td><input type="checkbox"/> Operator</td><td><input type="checkbox"/> Bending</td><td><input type="checkbox"/> Set-up</td><td><input type="checkbox"/> Power Loss/Surge</td><td><input type="checkbox"/> Positioned Wrong</td></tr> <tr><td><input type="checkbox"/> Design</td><td><input type="checkbox"/> Offset/Setup</td><td><input type="checkbox"/> Centre Not Concentric</td><td><input type="checkbox"/> BOM/Route</td><td><input type="checkbox"/> Folio/Program</td><td><input type="checkbox"/> Outside Dimensions</td></tr> <tr><td><input type="checkbox"/> Doc/Data</td><td><input type="checkbox"/> Supplier</td><td><input type="checkbox"/> Cracks</td><td><input type="checkbox"/> Broken/Damage/Defect</td><td><input type="checkbox"/> Grain</td><td><input type="checkbox"/> Over/Under tolerance</td></tr> <tr><td><input type="checkbox"/> Equip/Tooling</td><td><input type="checkbox"/> Training</td><td><input type="checkbox"/> Crimp/Kink/Ripple/Wave</td><td><input type="checkbox"/> Inspection Incomplete/Unqualified</td><td><input type="checkbox"/> Weld</td><td><input type="checkbox"/> Part Incorrect</td></tr> <tr><td><input type="checkbox"/> Handling/Pre</td><td><input type="checkbox"/> Use for Testing</td><td><input type="checkbox"/> Cuffs</td><td><input type="checkbox"/> Contamination</td><td><input type="checkbox"/> Wrong Stock Pulled</td><td><input type="checkbox"/> Part Lost/Missing</td></tr> <tr><td><input type="checkbox"/> Material</td><td><input type="checkbox"/> Poor Information</td><td><input type="checkbox"/> Crushing</td><td><input type="checkbox"/> Countersink</td><td><input type="checkbox"/> Out of Sequence</td><td><input type="checkbox"/> Part Moved</td></tr> <tr><td><input type="checkbox"/> Internal Transport</td><td><input type="checkbox"/> Rushing</td><td><input type="checkbox"/> Heat Treat</td><td><input type="checkbox"/> Cut Too Short</td><td><input type="checkbox"/> Off-set</td><td><input type="checkbox"/> Drawing</td></tr> <tr><td><input type="checkbox"/> Tribal Knowledge</td><td><input type="checkbox"/> Product Improvement</td><td><input type="checkbox"/> Wave/Twist in Tube</td><td><input type="checkbox"/> Instructions Incomplete/Unclear</td><td><input type="checkbox"/> Mislabeled</td><td><input type="checkbox"/> Finish</td></tr> <tr><td><input type="checkbox"/> LOA</td><td><input type="checkbox"/> Process Improvement</td><td><input type="checkbox"/> Marks/Chatter</td><td><input type="checkbox"/> Drill Holes</td><td><input type="checkbox"/> Fit/Function</td><td><input type="checkbox"/> Misread</td></tr> <tr><td><input type="checkbox"/> Substation</td><td><input type="checkbox"/> Manufacturing Process</td><td></td><td></td><td><input type="checkbox"/> Misaligned/off center</td><td><input type="checkbox"/> Turning Sequence</td></tr> <tr><td><input type="checkbox"/> Past Expiry Date</td><td><input type="checkbox"/> Past Due</td><td colspan="4" rowspan="2" style="text-align: center; vertical-align: top;">OTHER : _____</td></tr> <tr><td><input type="checkbox"/> Misidentified</td><td></td></tr> </table> | <input type="checkbox"/> Environment                                                        | <input type="checkbox"/> Operator                                                                                                                                                                                                                                                                                                                                                                                                                                                     | <input type="checkbox"/> Bending                                                                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/> Set-up                | <input type="checkbox"/> Power Loss/Surge     | <input type="checkbox"/> Positioned Wrong | <input type="checkbox"/> Design | <input type="checkbox"/> Offset/Setup | <input type="checkbox"/> Centre Not Concentric | <input type="checkbox"/> BOM/Route | <input type="checkbox"/> Folio/Program | <input type="checkbox"/> Outside Dimensions | <input type="checkbox"/> Doc/Data | <input type="checkbox"/> Supplier | <input type="checkbox"/> Cracks | <input type="checkbox"/> Broken/Damage/Defect | <input type="checkbox"/> Grain | <input type="checkbox"/> Over/Under tolerance | <input type="checkbox"/> Equip/Tooling | <input type="checkbox"/> Training | <input type="checkbox"/> Crimp/Kink/Ripple/Wave | <input type="checkbox"/> Inspection Incomplete/Unqualified | <input type="checkbox"/> Weld | <input type="checkbox"/> Part Incorrect | <input type="checkbox"/> Handling/Pre | <input type="checkbox"/> Use for Testing | <input type="checkbox"/> Cuffs | <input type="checkbox"/> Contamination | <input type="checkbox"/> Wrong Stock Pulled | <input type="checkbox"/> Part Lost/Missing | <input type="checkbox"/> Material | <input type="checkbox"/> Poor Information | <input type="checkbox"/> Crushing | <input type="checkbox"/> Countersink | <input type="checkbox"/> Out of Sequence | <input type="checkbox"/> Part Moved | <input type="checkbox"/> Internal Transport | <input type="checkbox"/> Rushing | <input type="checkbox"/> Heat Treat | <input type="checkbox"/> Cut Too Short | <input type="checkbox"/> Off-set | <input type="checkbox"/> Drawing | <input type="checkbox"/> Tribal Knowledge | <input type="checkbox"/> Product Improvement | <input type="checkbox"/> Wave/Twist in Tube | <input type="checkbox"/> Instructions Incomplete/Unclear | <input type="checkbox"/> Mislabeled | <input type="checkbox"/> Finish | <input type="checkbox"/> LOA | <input type="checkbox"/> Process Improvement | <input type="checkbox"/> Marks/Chatter | <input type="checkbox"/> Drill Holes | <input type="checkbox"/> Fit/Function | <input type="checkbox"/> Misread | <input type="checkbox"/> Substation | <input type="checkbox"/> Manufacturing Process |  |  | <input type="checkbox"/> Misaligned/off center | <input type="checkbox"/> Turning Sequence | <input type="checkbox"/> Past Expiry Date | <input type="checkbox"/> Past Due | OTHER : _____ |  |  |  | <input type="checkbox"/> Misidentified |  |  |
| <input type="checkbox"/> Environment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   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| <input type="checkbox"/> Design                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| <input type="checkbox"/> Doc/Data                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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                                                                                                                                            | <input type="checkbox"/> Grain                 | <input type="checkbox"/> Over/Under tolerance |                                           |                                 |                                       |                                                |                                    |                                        |                                             |                                   |                                   |                                 |                                               |                                |                                               |                                        |                                   |                                                 |                                                            |                               |                 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| <input type="checkbox"/> Equip/Tooling                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/> Training                                                           | <input type="checkbox"/> Crimp/Kink/Ripple/Wave                                                                                                                                                                                                                                                                                                                                                                                                                                       | <input type="checkbox"/> Inspection Incomplete/Unqualified                                                                                                                                                                                                                                                                                                                                                                  | <input type="checkbox"/> Weld                  | <input type="checkbox"/> Part Incorrect       |                                           |                                 |                                       |                                                |                                    |                                        |                                             |                                   |                                   |                                 |                                               |                                |                                               |                                        |                                   |                                                 |                                                            |                               |                 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| <input type="checkbox"/> Handling/Pre                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  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                                                                                                                                            | <input type="checkbox"/> Wrong Stock Pulled    | <input type="checkbox"/> Part Lost/Missing    |                                           |                                 |                                       |                                                |                                    |                                        |                                             |                                   |                                   |                                 |                                               |                                |                                               |                                        |                                   |                                                 |                                                            |                               |                 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| <input type="checkbox"/> Material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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                                                                                                                                            | <input type="checkbox"/> Out of Sequence       | <input type="checkbox"/> Part Moved           |                                           |                                 |                                       |                                                |                                    |                                        |                                             |                                   |                                   |                                 |                                               |                                |                                               |                                        |                                   |                                                 |                                                            |                               |                 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| <input type="checkbox"/> Internal Transport                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            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                                                                                                                                            | <input type="checkbox"/> Off-set               | <input type="checkbox"/> Drawing              |                                           |                                 |                                       |                                                |                                    |                                        |                                             |                                   |                                   |                                 |                                               |                                |                                               |                                        |                                   |                                                 |                                                            |                               |                 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| <input type="checkbox"/> Tribal Knowledge                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <input type="checkbox"/> Product Improvement                                                | <input type="checkbox"/> Wave/Twist in Tube                                                                                                                                                                                                                                                                                                                                                                                                                                           | <input type="checkbox"/> Instructions Incomplete/Unclear                                                                                                                                                                                                                                                                                                                                                                    | <input type="checkbox"/> Mislabeled            | <input type="checkbox"/> Finish               |                                           |                                 |                                       |                                                |                                    |                                        |                                             |                                   |                                   |                                 |                                               |                                |                                               |                                        |                                   |                                                 |                                                            |                               |                 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| <input type="checkbox"/> LOA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <input type="checkbox"/> Process Improvement                                                | <input type="checkbox"/> Marks/Chatter                                                                                                                                                                                                                                                                                                                                                                                                                                                | <input type="checkbox"/> Drill Holes                                                                                                                                                                                                                                                                                                                                                                                        | <input type="checkbox"/> Fit/Function          | <input type="checkbox"/> Misread              |                                           |                                 |                                       |                                                |                                    |                                        |                                             |                                   |                                   |                                 |                                               |                                |                                               |                                        |                                   |                                                 |                                                            |                               |                 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| <input type="checkbox"/> Substation                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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                                                                                                                                            | <input type="checkbox"/> Misaligned/off center | <input type="checkbox"/> Turning Sequence     |                                           |                                 |                                       |                                                |                                    |                                        |                                             |                                   |                                   |                                 |                                               |                                |                                               |                                        |                                   |                                                 |                                                            |                               |                 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| <input type="checkbox"/> Past Expiry Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              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DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

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| Work Order: _____<br><br>Part No. _____<br><br>NCR No. _____                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>DISPOSITION</b><br><br>Rework <input type="checkbox"/><br>Scrap <input type="checkbox"/><br>Use-as-is <input type="checkbox"/><br>Suspected Unapproved <input type="checkbox"/> | <b>AGAINST DEPARTMENT/PROCESS</b><br><br><div style="display: flex; justify-content: space-between;"> <div>           Skid-tube <input type="checkbox"/><br/>           Machining <input type="checkbox"/><br/>           Thermoforming <input type="checkbox"/><br/>           Large Fab <input type="checkbox"/> </div> <div>           Cross tube <input type="checkbox"/><br/>           Small Fab <input type="checkbox"/><br/>           Finishing <input type="checkbox"/><br/>           Composite <input type="checkbox"/> </div> <div>           Water Jet <input type="checkbox"/><br/>           Prod. Eng. Coord. <input type="checkbox"/><br/>           Rec/Store/Packaging <input type="checkbox"/><br/>           Supplier <input type="checkbox"/> </div> <div>           Engineering <input type="checkbox"/><br/>           Quality <input type="checkbox"/><br/>           Other <input type="checkbox"/> </div> </div> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                       |  |
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| <b>Root Cause</b><br><div style="display: flex;"> <div style="flex: 1;">           Environment <input type="checkbox"/><br/>           Design <input type="checkbox"/><br/>           Doc/Data <input type="checkbox"/><br/>           Equip/Tooling <input type="checkbox"/><br/>           Handling/Pre <input type="checkbox"/><br/>           Material <input type="checkbox"/><br/>           Internal Transport <input type="checkbox"/><br/>           Tribal Knowledge <input type="checkbox"/><br/>           LOA <input type="checkbox"/><br/>           Substation <input type="checkbox"/><br/>           Past Expiry Date <input type="checkbox"/><br/>           Misidentified <input type="checkbox"/> </div> <div style="flex: 1;">           No Re-verification <input type="checkbox"/><br/>           Operator <input type="checkbox"/><br/>           Offset/Setup <input type="checkbox"/><br/>           Supplier <input type="checkbox"/><br/>           Training <input type="checkbox"/><br/>           Use for Testing <input type="checkbox"/><br/>           Poor Information <input type="checkbox"/><br/>           Rushing <input type="checkbox"/><br/>           Product Improvement <input type="checkbox"/><br/>           Process Improvement <input type="checkbox"/><br/>           Manufacturing Process <input type="checkbox"/><br/>           Past Due <input type="checkbox"/> </div> </div> |                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <b>FAULT CATEGORY</b><br><div style="display: flex;"> <div style="flex: 1;">           Pressure/Forced <input type="checkbox"/><br/>           Bending <input type="checkbox"/><br/>           Centre Not Concentric <input type="checkbox"/><br/>           Cracks <input type="checkbox"/><br/>           Crimp/Kink/Ripple/Wave <input type="checkbox"/><br/>           Cuffs <input type="checkbox"/><br/>           Crushing <input type="checkbox"/><br/>           Heat Treat <input type="checkbox"/><br/>           Wave/Twist in Tube <input type="checkbox"/><br/>           Marks/Chatter <input type="checkbox"/> </div> <div style="flex: 1;">           Temperature/Cure <input type="checkbox"/><br/>           Set-up <input type="checkbox"/><br/>           BOM/Route <input type="checkbox"/><br/>           Broken/Damage/Defect <input type="checkbox"/><br/>           Inspection Incomplete/Unqualified <input type="checkbox"/><br/>           Contamination <input type="checkbox"/><br/>           Countersink <input type="checkbox"/><br/>           Cut Too Short <input type="checkbox"/><br/>           Instructions Incomplete/Unclear <input type="checkbox"/><br/>           Drill Holes <input type="checkbox"/> </div> <div style="flex: 1;">           Power Loss/Surge <input type="checkbox"/><br/>           Folio/Program <input type="checkbox"/><br/>           Grain <input type="checkbox"/><br/>           Weld <input type="checkbox"/><br/>           Wrong Stock Pulled <input type="checkbox"/><br/>           Out of Sequence <input type="checkbox"/><br/>           Off-set <input type="checkbox"/><br/>           Misabeled <input type="checkbox"/><br/>           Fit/Function <input type="checkbox"/><br/>           Misaligned/off center <input type="checkbox"/> </div> <div style="flex: 1;">           Positioned Wrong <input type="checkbox"/><br/>           Outside Dimensions <input type="checkbox"/><br/>           Over/Under tolerance <input type="checkbox"/><br/>           Part Incorrect <input type="checkbox"/><br/>           Part Lost/Missing <input type="checkbox"/><br/>           Part Moved <input type="checkbox"/><br/>           Drawing <input type="checkbox"/><br/>           Finish <input type="checkbox"/><br/>           Misread <input type="checkbox"/><br/>           Turning Sequence <input type="checkbox"/> </div> </div> |                       |  |
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